

ABSTRACT

Method of generating a digital signal that is representative of match errors in an analog digital conversion system with time interleaving, and an analog digital converter with time interleaving using same

The invention relates to a method for generating a digital signal representative of the pairing error between the channels of an analog digital conversion system with time interleaving, a method for suppressing the errors thus calculated and an analog digital conversion system with time interleaving using same.

The present invention proposes a less complex digital solution since it does not require the extraction of the defects of the signal at the output of the converter. It makes it possible to correct the pairing errors by the direct creation of digital signals representative of these errors, and their subtraction from the digitized signal at the output of the conversion system.

An object of the invention is a method for generating a digital signal representative of the pairing error between the channels of an analog digital conversion system with time interleaving (CAN 10) comprising an analog digital converter ($CAN_1, CAN_2, \dots, CAN_N$) on each channel. The said method comprises the determination of the spectrum (11-12) of said digital signal as a function of the frequency response of the analog digital conversion system with time interleaving (CAN 10) to at least one analog calibration signal (IC).

[Figure 4]